



**Congratulations!** You've just joined countless others in what may be one of the best decisions you've ever made. For over 20 years Charvel has been creating some of the finest guitars and basses in the music world and you are now the owner of one of them, so be proud. Long before the late, great Randy Rhoads walked into our shop we made it our business to make the tools that musicians want. A Charvel isn't for everyone, but you're not everyone, are you? Take a few moments between staring at you're new beast and wailing on it to read some of the info in this manual. Keep in mind that some procedures in this manual should only be performed by qualified technicians or persons who have experience in neck adjustments and intonation.

## CHARVEL OWNER'S MANUAL – ALL MODELS

### CONTROLS

- 1. VOLUME CONTROL:** This knob acts as the master output of the guitar. Rotating the knob clockwise will increase the volume, counterclockwise will decrease the volume - DUH!
- 2. TONE CONTROL:** This knob acts as a high frequency roll off. With the knob turned fully clockwise, all frequencies are present. When the knob is turned counterclockwise, the higher frequencies are rolled off, giving a more muted tone.
- 3. PICKUP SELECTOR SWITCH:** The pickup switch is used to switch between different combinations of the pickups. We use three main types of switches in most of our models. The 3-way slotted, 3-way toggle and 5-way slotted. The 3-way is used in most of our 2 pickup guitars and works as follows: 1=neck pickup; 2=neck and bridge pickup; 3=bridge pickup. The 5-way switch is used on many Charvel guitars in both 3-pickup and some 2-pickup models. In a 3-pickup model, the switch is as follows: 1=neck; 2=neck and middle; 3=neck; 4=middle and bridge; 5=bridge.

### BRIDGE

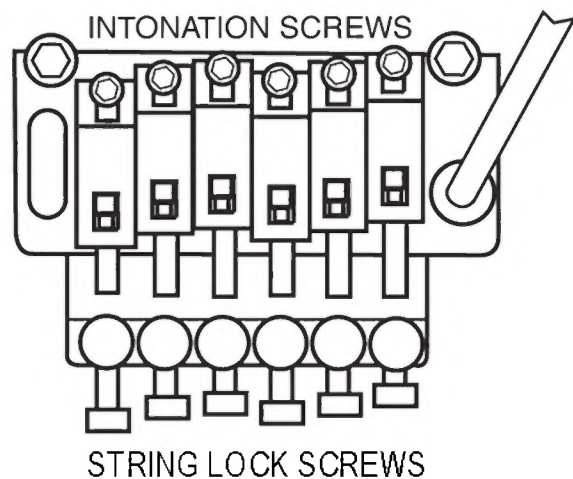
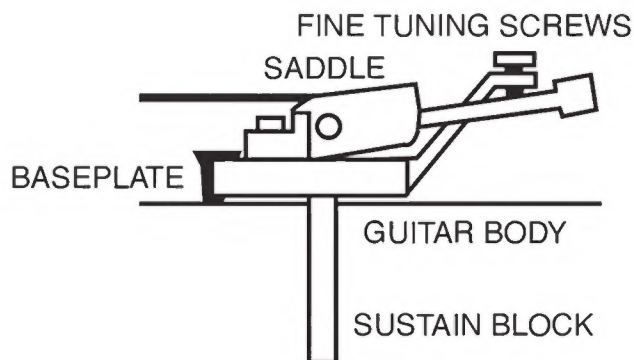
Charvel guitars use an assortment of bridge styles for various models. Here is a brief explanation of each type we use.

- 1. Tunamatic:** It has a simple height adjustment via mounting screws and intonation is adjusted by screws at each bridge saddle. The strings can either run thru the body or are attached to a stop bar tailpiece.
- 2. Vintage Style Hardtail:** String height adjustment is done by small allen screws on each side of the individual saddles. Intonation is done by the screw mounting the saddles to the rear of the bridgeplate.
- 3. Vintage Style Tremolo:** It is a very basic, 2 point fulcrum style with self centering saddles. This bridge is designed to rest flat on the body meaning it is not a floating tremolo.
- 4. Vintage Style Floating Tremolo:** This is an upgraded type of the Vintage Style tremolo. It can be adjusted to; sit flat or float above the body.
- 5. Double Locking Tremolos:** This is the most common type bridge and can be found on most of our guitars. It is very simple to work with and work on with a little guidance and patience.

**Note:** For more information and technical tips and help, be sure to check out [www.mrgearhead.com](http://www.mrgearhead.com)

## RESTRINGING THE DOUBLE LOCKING TREM

1. Before loosening the strings, slip a small stack of business cards or a pencil under the bridge plate to maintain string tension and keep the bridge parallel. **NOTE:** There are many products on the market today that will assist in Floyd Rose® setups. Ask your local retailer for more info or check out our website [www.mrgearhead.com](http://www.mrgearhead.com).
2. Loosen the locknut.
3. Loosen string at tuner.
4. Loosen string clamping screw at bridge.
5. Remove the strings from the guitar.
6. Cut the ball end off the new strings.
7. Insert the string between the clamping block and the saddle.
8. Tighten the screw to lock the string in place. Do not overtighten!
9. Insert string into tuner.
10. Tune to pitch, stretch string with thumb and fingers, retune and repeat several times until the string will not detune.
11. Repeat this process for all strings before locking down the lock nut and fine tuning.



## SET UP

This is the one step that will determine the feel or "action" of your guitar. A few things should be taken into consideration before setting the intonation. What type, brand and gauge strings are you going to use? How high do you want the strings from the fretboard? How much spring tension do you want (how high do you want the bridge to float)? These will need to be determined before you get started.

1. **Strings:** Any variation will alter the overall action and intonation, so be sure to have to settle on, and consistently use a particular gauge and brand of string.
2. **String Height:** If your tremolo pivots on two mounting studs that go into the guitar body, an allen wrench is used to raise or lower the bridge. If your bridge is a vintage style or a bass, there are two allen wrench adjustments on each saddle that will raise and lower each string. Adjust it too high and you lose tone and intonation, too low and the frets will buzz and the pickups will rattle... not too cool huh.
3. **Spring Tension:** This adjustment is to set how high the tremolo is to float. The best setting, for intonation's sake is exactly parallel to the body. Heavier strings will need more tension, lighter strings will need less. This will take quite a few retunings and a lot of patience. Need help? Check out our Tech Tips at [www.mrgearhead.com](http://www.mrgearhead.com)

## FACTORY SPECS

The following are Charvel's factory string height settings. The specs are measured by the distance between the bottom of the string and the top of the 12th fret. Please note that any problems that may arise from lowering the string height below our factory specifications, will not be covered by the Charvel warranty.

	TREBLE SIDE	BASS SIDE
Electric Guitar	1.5mm	1.5mm

**Charvel guitars come with the following string gauges:**

	1st	2nd	3rd	4th	5th	6th	7th
6 String Guitar	.009	.011	.016	.024	.032	.042	N/A

## PICKUP ADJUSTMENT

There are a few rules to follow on pickup adjustments; The pickup is adjusted by screws on either side of the pickup housing. Set it too high and string buzzing may occur when playing in the upper register of the neck. Too low and a loss of sustain and output is likely. Another is that humbuckers need to be set level in order for them to cancel out the hum properly.

## NECK ADJUSTMENT

This adjustment is done first over any others and must be done for proper action, intonation and fretting. This is done with strings tuned to pitch. Fret instrument at 1st fret and at body/neck joint. The space between the top of the 8th fret and bottom of the string should be .020 or whatever you are comfortable with. Neck adjustments should be done in 1/4 turn increments. This is not the proper set up for everyone and your preferences may vary depending on your style.

## INTONATION

Be sure that all of the above adjustments were done prior to setting the intonation. First, make sure the locknut is loosened. The object is to adjust the string length to ensure a true tonal response. This is achieved by ringing the harmonic at the 12th fret and matching it to the fundamental note at the 12th. This should be done with an electronic tuner to get an accurate reading. If the note is sharp, move the saddle back. If the note is flat, move the saddle forward. Remember the simple rule...flat forward, sharp back. For more information please check out our website at [www.mrgearhead.com](http://www.mrgearhead.com)

## GENERAL CARE

These are a few guidelines to keep your new Charvel in top form. The body, neck and headstock should be wiped clean with a clean soft cloth and a guitar polish after every use. Try not to get polish directly on the hardware, this will only cause funk to build up and it will have to be cleaned as well.

The fingerboard should be cleaned everytime you change strings. There are many cleaners on the market and most will dry the fingerboard (Most window cleaning products have ammonia in them and will certainly dry the fingerboard dramatically) so be sure to oil the fingerboard after you clean it. There are many great oils today made just for fingerboards so ask your local dealer for more information. Don't let the board dry out, it will shrink and/or crack, causing the frets to raise up and become unlevel and unplayable.

The hardware can be cleaned with a dry rag. If you have acidic perspiration or perspire excessively, please keep the hardware well oiled or it will rust and corrode. There are several tips on cleaning and maintaining your guitar on our website at [www.mrgearhead.com](http://www.mrgearhead.com)

The Charvel you've chosen is a fine musical instrument and like any high quality product, care and regular maintenance should be a priority to help your guitar or bass last a lifetime. Thank you for choosing Charvel, we appreciate the opportunity to serve you. Please take a moment to fill out the enclosed owner's registration and return it to us so that we may learn to better serve your needs. Also, be sure to read the care suggestions on the following page. For more help be sure to visit our website at [www.mrgearhead.com](http://www.mrgearhead.com), thank you.

## BATTERY REPLACEMENT

On all of our active circuits, 9 volt batteries are used to power-up. The systems feature the latest in IC circuitry, with very low power requirement. The battery is switched on when a cord is inserted into the input jack, so be sure to unplug the guitar/bass when not in use to avoid unnecessary power drain.

**NOTE:** Unless the instrument is equipped with a separate battery box, the battery is contained within the electric control cavity.

## CARE SUGGESTIONS

- ~ NEVER store your guitar/bass in a hot car trunk! The HEAT WILL CAUSE SEVERE DAMAGE to your instrument.
- ~ Always clean your strings after every use.
- ~ Change strings at least every 20 playing hours.
- ~ Wipe down the guitar with a clean, soft cloth after every use to remove sweat, etc from building up.
- ~ Clean and oil fingerboard everytime you change strings.
- ~ Do not overtighten any of the screws on the instrument. In most cases snug is best.
- ~ When traveling by air be sure to detune strings by 1 step. Have an agent check your guitar before locking the case and tape the case closed to prevent tampering.
- ~ Adjustments may need to be performed when you move your instrument into or out of different climates of altitude or humidity



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